IN THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) An optical device comprising at least

a substantially planar waveguiding substrate for guiding a light wave within the substrate in a direction of ~~the~~ a substrate plane based substantially on total internal reflections,

a preformed, diffractive grating structure carried by the waveguiding substrate and arranged to couple energy of the light wave between the substrate and surroundings thereof, wherein said preformed, diffractive grating structure is a preformed surface relief arranged on an electrically deformable dielectric and viscoelastic layer, and that the device further comprises at least

a first substantially transparent electrode structure arranged between the waveguiding substrate and the viscoelastic layer,

a second substantially transparent electrode structure arranged opposite to the viscoelastic layer leaving a dielectric gap towards a free surface of the viscoelastic layer having a surface relief, and

control ~~means~~ module, for applying a control voltage between the first and second electrode structures to generate an electric field passing through an interface between the viscoelastic layer and the dielectric gap in order to electrically deform the surface relief of the viscoelastic layer.

2. (Currently Amended) The device according to the claim 1, wherein said control ~~means are~~ module is arranged to electrically deform the surface relief of the viscoelastic layer sequentially in time.

3. (Original) The device according to the claim 2, wherein the deformation of the surface relief of the viscoelastic layer is adjusted to produce desired diffraction properties for given wavelengths of the light wave.

4. (Original) The device according to the claim 3, wherein the diffraction properties of the surface relief of the viscoelastic layer are arranged to be substantially similar for all of the given wavelengths of the light wave.

5. (Original) The device according to claim 1, wherein the material of the viscoelastic layer is a preformable polymer compound.

6. (Original) The device according to claim 1, wherein the material of the dielectric gap is air, gas or vacuum.

7. (Original) The device according to claim 1, wherein at least one of the first and second electrode structures comprises a single and substantially planar electrode zone.

8. (Original) The device according to claim 1, wherein at least one of the first and second electrode structures comprises multiple electrode zones.

9. (Previously Presented) The device according to claim 1, wherein at least one of the first and second electrode structures is of a light transparent type.

10. (Original) The device according to claim 1, wherein the device is arranged to alter at least one cross-sectional dimension of the light wave coupled between the substrate and the surroundings.

11. (Original) The device according to the claim 10, wherein multiple devices are arranged on a common waveguiding substrate in order to alter several cross-sectional dimensions of the light wave.

12. (Original) The device according to claim 1, wherein the device is arranged to enlarge the exit pupil of an optical system.

13. (Original) The device according to claim 1, wherein the device is arranged to enlarge the exit pupil of a virtual display.

14. (Original) The device according to claim 1, wherein the device is arranged to enlarge the exit pupil of a sequential color virtual display and the diffraction properties of the viscoelastic layer are arranged to control colour uniformity of said virtual display.

15. (New) A device, comprising:

a substantially planar waveguiding substrate arranged to guide a light wave within said substrate in ~~the~~ a direction of ~~the~~ a substrate plane based substantially on total internal reflections in order to provide enlarging of an exit pupil of an optical system,

a first diffractive grating structure arranged to diffract said light wave between said substrate and surroundings,

a second diffractive grating structure arranged to diffract said light wave, wherein said second grating structure is a preformed surface relief arranged on an electrically deformable dielectric and viscoelastic layer,

a first substantially light transparent electrode structure arranged between said substrate and said viscoelastic layer,

a second substantially light transparent electrode structure arranged opposite to said viscoelastic layer leaving a dielectric gap towards a free surface of said viscoelastic layer, and

a control module for applying a control voltage between said first and second electrode structures to generate an electric field passing through an interface between said viscoelastic layer and said dielectric gap in order to electrically deform the surface relief of said viscoelastic layer.

16. (New) The device according to the claim 15, wherein said control module is arranged to electrically deform the surface relief of the viscoelastic layer sequentially in time.

17. (New) A method, comprising

guiding a light wave within a planar waveguiding substrate in a direction of ~~the~~ a substrate plane based substantially on total internal reflections,

diffracting said light wave by a preformed diffractive grating structure, wherein said preformed diffractive grating structure is a preformed surface relief arranged on an electrically deformable viscoelastic layer having a free surface, and

applying an electric field to pass through said free surface in order to electrically deform a surface relief of said viscoelastic layer.

18. (Original) The method according to the claim 17, wherein the deformation of the surface relief of the viscoelastic layer is adjusted to produce desired diffraction properties for given wavelengths of the light wave.

19. (New) An optical device comprising at least

waveguiding means, for guiding a light wave within said waveguiding means in a direction of a waveguiding means plane based substantially on total internal reflections,

means for diffraction carried by the waveguiding means and arranged to couple energy of the light wave between the waveguiding means and surroundings thereof, wherein said means for diffraction is a preformed surface relief arranged on an electrically deformable dielectric and viscoelastic layer, and that the device further comprises at least

first electrode means arranged between the waveguiding means and the viscoelastic layer,

second substantially transparent electrode means arranged opposite to the viscoelastic layer leaving a dielectric gap towards a free surface of the viscoelastic layer having a surface relief, and

control means, for applying a control voltage between the first and second electrode means to generate an electric field passing through an interface between the viscoelastic layer and the dielectric gap in order to electrically deform the surface relief of the viscoelastic layer.

20. (New) The device according to the claim 15, wherein said waveguiding means is a substantially planar waveguiding substrate and said means for diffraction is a preformed diffractive grating structure.